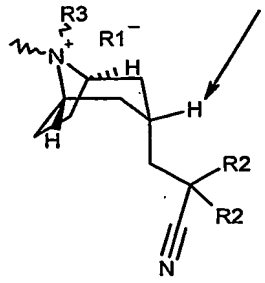
What is claimed is:

1. A compound having structure I as indicated below:



(I)

wherein:

$R1^-$ represents an anion associated with the positive charge of the N atom; and

R2 is selected from the group consisting of straight or branched chain lower alkyl groups (having preferably from 1 to 6 carbon atoms), cycloalkyl groups (having from 5 to 6 carbon atoms), cycloalkyl-alkyl (having 6 to 10 carbon atoms), heterocycloalkyl (having 5 to 6 carbon atoms) and N or O as the heteroatom, heterocycloalkyl-alkyl (having 6 to10 carbon atoms) and N or O as the heteroatom, aryl, optionally substituted aryl, heteroaryl, and optionally substituted heteroaryl;

R3 is selected from the group consisting of $(C_2\text{-}C_{12})$alkyl, $(C_1\text{-}C_6)$alkenyl, $(C_1\text{-}C_6)$alkyl$(C_3\text{-}C_6)$cycloalkyl, $(C_1\text{-}C_6)$alkyl-phenyl, $(C_1\text{-}C_6)$alkyl-OH, $(C_1\text{-}C_6)$alkyl-CN, $(C_1\text{-}C_6)$alkyl-halogen, $(C_1\text{-}C_6)$alkyl-CF_3, $(C_1\text{-}C_6)$alkyl-OCH_3, $(C_1\text{-}C_6)$alkyl-O-$(C_1\text{-}C_6)$alkyl-OCH_3 and $(C_1\text{-}C_6)$alkyl-O-$(C_1\text{-}C_6)$aryl. Preferred R3 substituents are in the endo position.

2. A compound according to claim 1 wherein the H atom indicated is in the exo position.

3. A compound according to claim 1 wherein $R1^-$ is selected from the group consisting of chloride, bromide, iodide, sulfate, benzene sulfonate and toluene sulfonate.

4. A compound according claim 1 selected from the group consisting of:
3-*Endo*)-3-(2-cyano-2,2-diphenylethyl)-8-(cyclohexylmethyl)-8-methyl-8-azoniabicyclo[3.2.1]octane bromide;
(3-*Endo*)-3-(2-cyano-2,2-diphenylethyl)-8-(cyclopropylmethyl)-8-methyl-8-azoniabicyclo[3.2.1]octane bromide;
(3-*Endo*)-8-butyl-3-(2-cyano-2,2-diphenylethyl)-8-methyl-8-azoniabicyclo[3.2.1]octane bromide;
(3-*Endo*)-8-(4-chlorobutyl)-3-(2-cyano-2,2-diphenylethyl)-8-methyl-8-azoniabicyclo[3.2.1]octane bromide;
(3-*Endo*)-3-(2-cyano-2,2-diphenylethyl)-8-dodecyl-8-methyl-8-azoniabicyclo[3.2.1]octane bromide;
(3-*Endo*)-3-(2-cyano-2,2-diphenylethyl)-8-methyl-8-(2-propen-1-yl)-8-azoniabicyclo[3.2.1]octane iodide;
(3-*Endo*)-3-(2-cyano-2,2-diphenylethyl)-8-methyl-8-(phenylmethyl)-8-azoniabicyclo[3.2.1]octane bromide;
(3-*Endo*)-3-(2-cyano-2,2-diphenylethyl)-8-(2-hydroxyethyl)-8-methyl-8-azoniabicyclo[3.2.1]octane bromide;
(3-*Endo*)-3-(2-cyano-2,2-diphenylethyl)-8-ethyl-8-methyl-8-azoniabicyclo[3.2.1]octane bromide;
(3-*Endo*)-3-(2-cyano-2,2-diphenylethyl)-8-methyl-8-propyl-8-azoniabicyclo[3.2.1]octane bromide;
(3-*Endo*)-3-(2-cyano-2,2-diphenylethyl)-8-(5-hexen-1-yl)-8-methyl-8-azoniabicyclo[3.2.1]octane bromide;
(3-*Endo*)-3-(2-cyano-2,2-diphenylethyl)-8-methyl-8-(4,4,4-trifluorobutyl)-8-azoniabicyclo[3.2.1]octane bromide;
(3-*Endo*)-3-(2-cyano-2,2-diphenylethyl)-8-methyl-8-(3-phenylpropyl)-8-azoniabicyclo[3.2.1]octane bromide;

(3-*Endo*)-3-(2-cyano-2,2-diphenylethyl)-8-(2-cyclohexylethyl)-8-methyl-8-azoniabicyclo[3.2.1]octane bromide;
(3-*Endo*)-3-(2-cyano-2,2-diphenylethyl)-8-(3-cyanopropyl)-8-methyl-8-azoniabicyclo[3.2.1]octane bromide;
(3-*Endo*)-3-(2-cyano-2,2-diphenylethyl)-8-methyl-8-[2-(methyloxy)ethyl]-8-azoniabicyclo[3.2.1]octane bromide;
(3-*Endo*)-3-(2-cyano-2,2-diphenylethyl)-8-methyl-8-(2-{[2-(methyloxy)ethyl]oxy}ethyl)-8-azoniabicyclo[3.2.1]octane bromide;
N-(*Endo*)-(3-*endo*)-3-(2-cyano-2,2-diphenylethyl)-(8-endo)-8-(5-hexen-1-yl)-8-methyl-8-azoniabicyclo[3.2.1]octane bromide;
N-(*Endo*)-(3-*endo*)-(2-cyano-2,2-diphenylethyl)-(8-endo)-methyl-8-{2-[(phenylmethyl)oxy]ethyl}-8-azoniabicyclo[3.2.1]octane bromide;
N-(*Endo*)-(3-*endo*)-(2-cyano-2,2-diphenylethyl)-8-methyl-8-(3-phenylpropyl)-8-azoniabicyclo[3.2.1] octane bromide; and
N-(*Endo*)-(3-*endo*)-(2-cyano-2,2-diphenylethyl)-8-methyl-8-[3-(phenyloxy)propyl]-8-azoniabicyclo[3.2.1]octane bromide.

5. A pharmaceutical composition for the treatment of muscarinic acetylcholine receptor mediated diseases comprising a compound according to claim 1 and a pharmaceutically acceptable carrier thereof.

6. A method of inhibiting the binding of acetylcholine to its receptors in a mammal in need thereof comprising administering a safe and effective amount of a compound according to claim 1.

7. A method of treating a muscarinic acetylcholine receptor mediated disease, wherein acetylcholine binds to said receptor, comprising administering a safe and effective amount of a compound according to claim 1.

8. A method according to claim 7 wherein the disease is selected from the group consisting of chronic obstructive lung disease, chronic bronchitis,

asthma, chronic respiratory obstruction, pulmonary fibrosis, pulmonary emphysema and allergic rhinitis.

9. A method according to claim 8 wherein administration is via inhalation via the mouth or nose.

10. A method according to claim 9 wherein administration is via a medicament dispenser selected from a reservoir dry powder inhaler, a multi-dose dry powder inhaler or a metered dose inhaler.

11. A method according to claim 10 wherein the compound is administered to a human and has a duration of action of 12 hours or more for a 1 mg dose.

12. A method according to claim 11 wherein the compound has a duration of action of 24 hours or more.

13. A method according to claim 12 wherein the compound has a duration of action of 36 hours or more.